

Drakes Estero, a superlative estuary in Point Reyes National Seashore

Drakes Estero was created as a drowned river valley, submerged by an ancient river on a small block of granitic-based crust of the Pacific Plate. The most recent sea level rise following the Late Pleistocene glacial formed the contemporary estuary 6,000 years ago. The sediments near the mouth of the estuary consist of sand deposited by strong longshore currents in Drakes Bay.

The protected and largely undeveloped lands of the Drakes Estero watershed provide high quality water. Freshwater inputs are largely from the small watersheds surrounding the estuary which encompass an area of 7,847 acres. The estuary proper encompasses around 2,000 acres.

The eastern portion of the estero (Estero de Limantour) is congressionally designated Wilderness Area and the rest of the estuary is designated potential wilderness and reverts to full wilderness in 2012. Special designation to Estero de Limantour was given by the California Department of Fish and Game as a state ecological reserve. The US Shorebird Conservation Plan recognizes Drakes/Limantour Esteros as one of the most significant areas to migratory shorebirds and waterfowl of the southern California coastal sub-region.

Seagrass beds and tidal mud flats are the most widespread habitat types in the estuary, followed by salt marsh and rocky intertidal areas. The large mudflats and extensive eelgrass beds in Drakes Estero are home to numerous invertebrates and serve as foraging and breeding grounds for many birds, fish, and pinnipeds.

Drakes Estero is one of the most ecologically pristine estuaries in California and the only coastal waters in the California that are in the National Wilderness Preservation System. Biotically, the estuary is exceptional:

- Extensive eelgrass beds support rare and specially protected species
- Reduced presence of non-native species: recent surveys show that many invasive species are only found where mariculture and oyster racks occur, but not in Limantour Estero.
- One of the largest harbor seal populations in California with numbers surpassing 1800
- Identified as significant area for the US Shorebird Conservation Plan: 86 Species of birds recorded in 2004, including Osprey and Black Brant.
- USFWS recognizes 18 species of concern, including Red-legged frog, Western Snowy Plover, Brown Pelican, Peregrine Falcon, and Marbled Murrelet.
- Recent fish survey identified over 30 species of fish, including rare and endangered species such as coho salmon, steelhead trout and three-spined stickleback.
- Rare plants occur along the shoreline of the estuary.

